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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,172	07/08/2003	Mamoru Okamoto	16819	8615

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EXAMINER

DUDEK, JAMES A

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,172

Applicant(s)

OKAMOTO ET AL.

Examiner

James A. Dudek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☐ Claim(s) 4 and 12-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant is claiming in claim 1, a passive type LCD with signal lines on one substrate and scanning lines on the opposing substrate. In claim 5, which depends on claim 1, Applicant claims a switching device in the passive configuration of claim 1. It is not clear however one would make an integrated passive and active display having signal lines on one substrate and scanning lines on different a substrate with an active device. Typically the scanning and signal lines are on the same substrates and applicant hasn't explained how to make such a device. These claim in there present form are not examinable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6693692 ("692").

692 teaches a LCD comprising a first substrate including a plurality of signal electrodes being arranged in parallel to one another along a first direction [4]; a second substrate including a plurality of scanning electrodes being arranged in parallel to one another along a second direction orthogonal to said first direction and a plurality of pixels regions each being placed in a one to one correspondence to an intersection between each of said signal electrodes and each of said scanning electrodes [3]; a liquid crystal layer inserted between said first substrate and said

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second substrate [6]; a backlight source to feed light to said liquid crystal layer [16] and wherein each of said pixel regions includes a reflective region having a reflective film to receives ambient light from an outside and to display in a reflective manner while being in a reflective display mode [14], and a transmissive region having a transmissive electrode film to allow light from said backlight source to be transmitted to display in a transmissive manner at time of operations in a transmissive display mode [14a]; and wherein in each of said pixel regions, said transparent electrode film is extended to said reflective film in a manner to cover at least one part of said reflective film [see figures 8-9].

Per claim 2, see insulating film 8.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6707519 ("519").

519 teaches a LCD comprising a first substrate including a plurality of signal electrodes being arranged in parallel to one another along a first direction [202]; a second substrate including a plurality of scanning electrodes being arranged in parallel to one another along a second direction orthogonal to said first direction and a plurality of pixels regions each being placed in a one to one correspondence to an intersection between each of said signal electrodes and each of said scanning electrodes [205]; a liquid crystal layer inserted between said first substrate and said second substrate [106]; a backlight source to feed light to said liquid crystal layer [112] and wherein each of said pixel regions includes a reflective region having a reflective film to receives ambient light from an outside and to display in a reflective manner while being in a reflective display mode [205], and a transmissive region having a transmissive electrode film to allow light from said backlight source to be transmitted to display in a transmissive manner at time of operations in a transmissive display mode [206 and 207]; and wherein in each of said pixel regions, said transparent electrode film is extended to said reflective film in a manner to cover at least one part of said reflective film [see figure 2c].

Per claim 3, see column 12 last full paragraph.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over 519 in view of 6657689 ("689")

519 lacks the different gap space for reflective regions. However, 689 teaches a different gap thickness for reflective regions in a transflective display. It would have been obvious to one of ordinary skill at the time of invention combine the 689s different gap thickness structure with 519 to improve the color fidelity of the cell.

Allowable Subject Matter

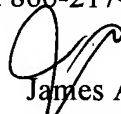
Claims 4 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. This is based on the passive configuration claimed in claim 1 not an active configuration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James A. Dudek
Primary Examiner
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